

Claims

[c1] What is claimed is:

1.A method of fabricating a stamper with microstructure patterns, the method comprising:

providing a substrate;

forming a first patterned layer on the substrate, a pattern of the first patterned layer being complementary to the microstructure patterns;

forming a second patterned layer on the substrate for defining an edge of the stamper; and

performing an electroforming process by taking the second patterned layer as a growth stop wall so as to form the stamper.

[c2] 2.The method of claim 1, wherein the method further comprises forming a seed layer above the substrate.

[c3] 3.The method of claim 2, wherein the seed layer is formed on a surface of the substrate and covers the first patterned layer so that a pattern presented by the seed layer on the first patterned layer is the same as the pattern of the first patterned layer.

[c4] 4.The method of claim 2, wherein the seed layer is

formed between the substrate and the first patterned layer.

- [c5] 5.The method of claim 2, wherein the seed layer is a metal layer.
- [c6] 6.The method of claim 1, wherein the substrate comprises a conductive material.
- [c7] 7.The method of claim 1, wherein the second patterned layer does not overlap the first patterned layer.
- [c8] 8.The method of claim 1, wherein a thickness of the second patterned layer is greater than a thickness of the stamper.
- [c9] 9.The method of claim 1, wherein the first patterned layer comprises a photosensitive material.
- [c10] 10.The method of claim 9, wherein the first patterned layer is a positive photoresist layer or a negative photoresist layer.
- [c11] 11.The method of claim 1, wherein the second patterned layer comprises a photosensitive material.
- [c12] 12.The method of claim 11, wherein the second patterned layer is a positive photoresist layer or a negative photoresist layer.

- [c13] 13.The method of claim 1, wherein the first patterned layer comprises a conductive material.
- [c14] 14.The method of claim 1, wherein the second patterned layer comprises an isolating material.
- [c15] 15.The method of claim 1, wherein the method further comprises releasing the stamper from the substrate so as to produce the complete stamper without a further cutting process.